

equivalent circuit when a human body approaches the left-hand side of the keyboard, or a second subordinate capacitor-equivalent circuit is formed in parallel to the second capacitor-equivalent circuit when a human body approaches the right-hand side of the keyboard.

[0048] Therefore, it can be determined whether a first use mode in which the user can perform key inputs by using both hands or a second use mode in which the user can perform key inputs by using the left hand only is used, according to a change in the alternating current flowing through the first or second capacitor-equivalent circuit, the change caused by a change in the capacitance of the first subordinate or second subordinate capacitor-equivalent circuit, generated according to the extent of approaching of the human body. The operation control means can assign a usual text character to each key of the keyboard in the first use mode, and command functions to left-hand-operation keys of the keyboard in the second use mode.

[0049] When the user input means is formed of a combination of a keyboard and a mouse, the use-form detection means can be formed of a transmission electrode disposed almost at one end of the mouse, a transmitter for supplying alternating current for transmission to the transmission electrode, a receiving electrode disposed almost at the other end of the mouse, and a receiver for receiving alternating current flowing through the receiving electrode. A first capacitor-equivalent circuit equivalent to a capacitor is formed between the transmission electrode and the receiving electrode, and a second capacitor-equivalent circuit is formed in parallel to the first capacitor-equivalent circuit when a human body approaches the upper surface of the mouse.

[0050] Therefore, it can be determined whether the user is using the mouse, according to a change in alternating current flowing through the first capacitor-equivalent circuit, the change caused by a change in the capacitance of the second capacitor-equivalent circuit, generated according to the extent of approaching of the human body. The operation control means can assign command functions to left-hand-operation keys of the keyboard when it is determined that the user is using the mouse.

[0051] Alternatively, the use-form detection means can be formed of modulation means for modulating the original signal to generate an output signal, transmission means formed of a first electrically conductive member and disposed on the user input means so as to be exposed to the outside to be able to transmit the output signal, receiving means formed of a second electrically conductive member and disposed on an external unit so as to be exposed to the outside to be able to receive the output signal, and demodulation means for demodulating the received signal.

[0052] In such a case, the use-form detection means can determine that the user is using the external unit when signal transfer between the transmission means and the receiving means is enabled by the contacts of a human body to the first and second electrically conductive members. Therefore, the operation control means can activate an application for the external unit when the use-form detection means detects the use of the external unit.

[0053] Alternatively, the use-form detection means can be formed of a plurality of line-shaped transmission electrodes, a transmitter for supplying alternating current for transmis-

sion to each of the transmission electrodes, a plurality of line-shaped receiving electrodes disposed so as not to contact each of the transmission electrodes, and a receiver for receiving alternating current flowing through the receiving electrodes. A use-form area where the plurality of transmission electrodes and the plurality of receiving electrodes intersect is superposed on a user input area of the user input apparatus, a first capacitor-equivalent circuit equivalent to a capacitor is formed at each of the intersections of the transmission electrodes and the receiving electrodes, and a second capacitor-equivalent circuit is formed in parallel to the first capacitor-equivalent circuit when a human body approaches the intersection of a transmission electrode and a receiving electrode. Therefore, the use-form detection means can detect the form of use in which the user uses the user input apparatus by the user's human body as a multi-dimensional value formed of an output obtained at each intersection, according to a change in alternating current flowing through the first capacitor-equivalent circuit, the change caused by a change in the capacitance of the second capacitor-equivalent circuit, generated according to the extent of approaching of the human body. Therefore, the operation control means can, for example, execute, as processing which uses the multi-dimensional value, using authentication processing by comparing and verifying a specified input operation performed by the user and a multi-dimensional value detected in the specified operation.

[0054] A third aspect of the present invention is a control method for a computer connected to a user input apparatus for the user to input data or a command by using the human body, and the control method for a computer connected to a user input apparatus is characterized by including

[0055] a use-form detection step of detecting a form in which the user uses the user input apparatus by the user's human body, and

[0056] an operation control step of changing the operation of the application being executed by the application execution means, according to a detection result obtained in the use-form detection step.

[0057] In the control method for a computer, according to the third aspect of the present invention, it is possible that, in the use-form detection step, it is determined whether the form in which the user uses the user input apparatus by the user's human body is a usual mode or an unusual mode, and in the operation control step, an assignment to an input content sent from the user input apparatus is switched in response to the detection of the unusual mode in the use-form detection step.

[0058] When the user input apparatus is a keyboard, for example, an assignment to each key on the keyboard can be switched in the operation control step in response to the detection of a use form in which the user can perform key inputs by using one hand only, in the use-form detection step.

[0059] Alternatively, when the user input apparatus is formed of a combination of a keyboard and a mouse, the control method may be configured such that, in the use-form detection step, it is determined whether a first use mode in which the user can perform key inputs by using both hands or a second use mode in which the user uses the mouse by the left hand and can perform key inputs only by the other